

Observer's Report.

10 March, 1945

SUBJECT: Notes on Recent Operations on the Tunisian Front

TO : Commander-in-Chief, Allied Forces

N 6534 A
In compliance with verbal instructions from the Commander-in-Chief, the following notes concerning recent operations on the Tunisian Front are submitted:

GENERAL:

It is my impression that preparatory battle-training conducted in the United States and in this theater has failed in some respects in that the required instruction has not always penetrated down into the smaller units and to the individual soldier as it should. It appears that we have sometimes stressed the training of the higher commanders and their staffs at the expense of adequate training for smaller units. My feeling in these matters has been very succinctly stated by the Commander-in-Chief when he said that if all soldiers were physically hardened to the extent of "being tough guys" and if they were properly instructed in all the elements of scouting and patrolling, military operations would be a success. To these remarks I would add the following: //

All platoons should be instructed in four or five standard plays just as a football team. Thereupon, it seems to me that even mediocre officers could be successful in average operations. I advocate that all troops undergo a course of training paralleling that of our Ranger Battalion which has been uniformly successful in its operations with a minimum of losses. Such training involves a maximum physical hardening, training for personal physical combat, deception, surprise, night operations and a thorough training in all weapons, such as the knife, the pistol, the rifle, the machine gun, the mortar and the rocket launcher. This is doubly important because the German and his allies, when commanded by Germans, are highly aggressive enemies. I think that this attitude on the part of the enemy applies not only to the theater in which we are now operating but will also apply to any theater of war in which we may oppose him. Up to the present time, we have had to meet him in the Tunisian theater with junior officers, inadequately trained, with equipment inferior to that of the enemy in some respects, and with troops who, in general, approached the problems at hand with the usual casual attitude of Americans caused by the belief that they were superior to any enemy to whom they might be opposed. Although this confidence is not to be discouraged, it should be backed up by the right kind of training.

Specifically, I would like again to stress two points: First, physical hardening to a degree that will give each individual a conviction of absolute physical superiority to his enemy and an active and burning desire to get at him. Second, that he will be so well versed, in not only the rudiments but also the practice of all the elements and the ramifications of scouting and patrolling, including night operations, that he

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by authority of (S-62) WDGS

by **E. S. JOHNSTON**
Colonel, Infantry
CUSTODIAN

- 1 -

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will be able to couple his desire to close with the enemy in either day or night operations with a high degree of scientific and practiced exactitude. Our experience with the enemy may be classified under the following special headings:

a. AIR.

(1) During the first few days of contact with the enemy, our losses included both materiel and personnel due to ground strafing. Thereafter, although we had materiel losses which could not be avoided because most vehicles must follow the roads, our personnel losses were practically nil. Experience made our soldiers riding on trucks decidedly air conscious. Upon the approach of hostile planes, they dismounted from trucks and dispersed, thereby presenting practically no target to the enemy. Captured documents have indicated that among missions assigned to the enemy air forces there were included at least four planes a day for the sole mission of ground strafing on the roads used by our troops and supply columns. To avoid confusing our troops and causing them unnecessary delays, friendly aircraft even when flying contact must be instructed to fly parallel to the roads and not over them, because our own troops on roads when approached by low-flying high-speed aircraft are unable to tell whether these aircraft are friendly or enemy. In my own experience before our aircraft stopped flying over the roads, I was forced to get off the road and take to the fields only twice by enemy aircraft but about ten times by friendly aircraft.

(2) At one time in our operations, notably in the second attack on the enemy-held town of Sened, our troops were attacked by twenty-eight dive bombers of which 25% were shot down. The lesson to be derived from this encounter is that all troops should be instructed to fire upon attacking bombers with all available weapons from the pistol to the antiaircraft gun. If this is done, the dive bomber is no longer a serious problem as it is highly vulnerable to ground fire. In the operations in front of Sened, information furnished by our intelligence indicates that all but four dive bombers available to the enemy in Tunisia at that time were destroyed by our ground fire and friendly aviation.

(3) There is a feeling among our ground troops that they are never furnished sufficient air cover. This is attributed to two reasons. First, our fighters have proved to be inferior to Messerschmitt 109's and to Focke-Wulf 190's, and in order to avoid undue losses, they have had to fly in large formations. Consequently, we cannot fly as many missions as the enemy with the same number of aircraft. Second, unless ground troops can see friendly planes overhead, they feel that the air forces are letting them down. I think that the ground forces should have it explained to them that it is not necessarily true that the air should furnish them with a visible "umbrella", but that air support is being furnished in the average operations even when our planes are not visible from the ground. Also that this air support included not only cover and reconnaissance over them, but also bombardment of enemy troops and airdromes.

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b. INFANTRY.

Infantry should be disabused of the idea that if they are outflanked they are defeated. However, our infantry must be taught all possible means of preventing enemy outflanking action and infiltration, principally by proper organization of the ground and by adequate reconnaissance. If you want to hold a mountain pass, for example, you must not only hold the pass itself but also the high ground on both sides of the pass and very active patrolling should be maintained up the ridges on both sides of the pass. Moreover, mine fields should not only be covered by fire but also forward outposts should be maintained within the confines of the mine fields themselves and occupied by night to prevent the enemy from coming in and either digging up the mines themselves or removing the detonators therefrom. One infantry regiment of the II Corps successfully organized a position even on flat ground. This regiment dug in with round spider holes as fire trenches and then dug slit trenches closely in rear of the fire trenches, which furnished sleeping accommodations for the men. From these the fire trenches could be immediately occupied. In this connection we must teach all troops that all trenches should be dug in so deeply that men occupying them will be furnished with a minimum of one and one-half feet of head cover to protect them from bomb splinters, shell fragments and tanks. With its own weapons, infantry properly dug in can stop tanks and they must be taught to do this before arrival on the battlefield. Commanders of all ranks from divisions down to platoons must be impressed with the necessity of not only reconnaissance before the battle but also continuing reconnaissance after the action has once been joined. There have been instances when commanders reported that the situation was well in hand when their flanks were enveloped and their lines were being infiltrated by the enemy. Reconnaissance must be active at all times even in a defensive role. Moreover, our infantry must be taught that envelopment or infiltration by the enemy does not mean defeat. They must be taught to stay in their positions organized for all-round fire whether infiltrated by infantry or passed over by tanks. They must remember that if they remain in their positions they constitute as great a threat to the enemy as the enemy does to them. The teachings that we have had in maneuver training in the United States that envelopment or penetration or infiltration meant disaster do not apply in modern battle. Even when forced to take the defensive, there is no such thing as actual static defense and the situation is invariably fluid.

d. NIGHT OPERATIONS.

(1) Until the present time the German and his allies have shown a decided dislike for night operations except for night infiltration and patrols by infantry. In one instance he attacked with armor without adequate reconnaissance between nine and ten o'clock at night. This armored attack was smeared with a decided loss to the enemy. On the other hand, such night operations as we have conducted with highly training troops, notably the Ranger Battalion, have been highly successful, resulting in high losses to the enemy and a decided increase in the morale of our own troops.

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(2) Accurate, intelligent reconnaissance, combined with map study, should precede all movement and particularly night movement. For example, at Sened an officer guide led an infantry battalion at night in trucks through our lines to a point two miles within the enemy line, where he bivouacked the battalion. At daybreak the battalion was taken under fire by the enemy. Most of the battalion fought their way back but equipment losses were severe. Again at Gafsa, after a reconnaissance, an anti-tank company commander leading his company to Sened at night took the El Guettar Road instead of the Sened road. Despite efforts of French to stop him he was not convinced of his error until his two leading vehicles came to grief on our own mine fields. The high mountain ridge running East from Gafsa provided an excellent landmark even at night. On the right road the mountain ridge was on his right; on the wrong road the mountain ridge was on his left. The only answer to such errors is more and continuous training in night operations until such errors cannot occur.

d. SUPPLY.

(1) At first there was a decided tendency on the part of all units whether in attack or defense to draw more ammunition than they could possibly use, even though ammunition was available in corps forward ammunition supply points. In the highly mobile operations which have been conducted to this date this practice often resulted in units going off and leaving ammunition in their old position which had to be removed by extra transportation from corps facilities. This matter was solved by allowing units to have on hand only ammunition required for basic loads based upon experience in combat and by supplying additional ammunition from corps supply points within easy reach of the units.

e. MINES AND DEMOLITIONS.

(1) The enemy has been well supplied with mines, booby traps and other demolitions and has used them to an extreme degree. After he was stopped and repulsed in the battle of the Kasserine Valley, he started a very precipitate retreat. However, it took almost two days for our troops to regain the pass at the foot of the valley due to the fact that the enemy had mined all roads and the margins thereof very extensively. Our advance could have been expedited to a considerable extent had troops other than Engineers have given instruction in mine detecting and mine recovery. Particularly, infantry must be taught to recover and lay mines. The enemy lays both land mines and personnel mines. He places his land mines not only on the roads themselves, but haphazardly along the sides. Some of these mines are placed so deeply in places such as chuck holes alongside the road and at other critical points that they cannot be detected by mine detectors. After enough trucks have run over a chuck hole, beside the road, the hole is worn down to a point that perhaps the twentieth truck to pass over is blown up. Also mines should be removed to dumps as soon as recovered, because in some instances after mine fields have been cleared and the mines have been stacked beside the road, Arabs, in enemy employ, have come back, during the night and replaced the mines. This has resulted in

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some additional truck losses. Moreover, detachments sent out to reconnoiter enemy mine fields have been too careless in their reconnaissance. This has resulted in unnecessary losses in equipment and personnel. As late as three days ago a lieutenant colonel had his jeep blown up and he himself lost a leg. As a result of British experiences in the Middle East, we have resorted to the expedient of covering the floors of all our vehicles with sand bags. While this will not prevent the loss of a vehicle, it will have some effect in saving the lives of the personnel in the vehicle.

f. COUNTERINTELLIGENCE.

(1) There is too much of a tendency on the part of our divisions to stick to a standard S.O.I. - especially with respect to a three-letter prearranged message code. This has resulted in the enemy deciphering our messages with comparative ease. Although the code had been changed with relative frequency, the order of the phrasing which the code had represented had not been changed; therefore, the enemy had been able to place the new code opposite the fixed phrasing and decipher our code system with ease. This situation was cured by replacing the three-letter code with a five-letter code difficult to decipher and by varying the order of the phrasing.

(2) Telephone conversations concerning secret matters must be in code. These codes should be changed frequently. This rule has been frequently violated.

g. COMMUNICATIONS.

Due to great distances and the great mobility of operations conducted up to the present time and to the lack of adequate material, telephone communication has been difficult and sometimes impossible. Not only in the present theater but in preparation for operations in all theaters, radio procedure must be stressed to the greatest degree possible.

h. TRANSPORTATION.

Almost without exception all tactical units have too much organic transportation. Consequently, these units not only take up too much road space, but this condition also produces an extravagant use of gasoline which not only is difficult to transport overseas to the present theater, but also presents a difficult supply problem within the theater. I believe that this evil could be remedied by drastic cuts in organic transportation and then insuring the necessary flexibility in tactical operations by making available in Corps or Army pools sufficient transportation to insure tactical or strategic movement.

i. OFFICERS.

Instruction in personal reconnaissance and troop leading must be insisted upon in the training of all officers. Reconnaissance in advance //

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of the battle is not enough, there must be containing battle reconnaissance up to and including the time that the engagement is broken off. Commanders must be well forward in order to keep in touch with the battle. Command posts must be well forward in order to insure not only communications, but a knowledge of the situation by the commander concerned. Command posts have sometimes been too far back in our operations.

IN CONCLUSION:

Almost without exception all Italian prisoners we captured and separated from their officers stated that they were glad to be out of the war, and that it was a matter of no importance to them which side won. As regards German prisoners, about one-half of those captured made the same statement, the other half gave the Nazi salute and were uncommunicative. Almost without exception all Germans captured stated that Rommel was a fine soldier and "a good fellow". There seems to be evidence that the Italians, whether for political reasons or not, are better supplied than the Germans. However, there is nothing to indicate that the Germans have been lacking in ammunition, transportation or gasoline.

Once again I would like to renew the recommendations made at the beginning of this memorandum: (1) That our troops be physically hardened to point that they are physically tougher than the enemy: (2) that they be thoroughly instructed in the elements and practice of scouting and patrolling, even if we have to resort to training similar to that given to the Ranger Battalion in order to achieve the desired results; (3) that night operations be stressed because in this type of operation we have invariably caught the enemy at a disadvantage and I do not believe that he has a stomach for night fighting. In the daytime he is extremely aggressive, almost to the point of being cock-sure and we must be able not only to counter, but to exceed him in this respect. We must teach our troops to outsmart the enemy. We have fallen victim to his ruses in more ways than one: for example, when he has wanted to save himself the trouble of making a detailed reconnaissance, he has made reconnaissance by fire and thereupon we have revealed our tactical dispositions by replying thereto. In tank fighting he places his anti-tank guns on his flanks and makes a demonstration in force to the front with the tanks, then withdraws to the rear and hopes to draw us within range of his anti-tank guns. We have twice fallen for that ruse. All armored units must learn to make thorough and adequate reconnaissance, including foot reconnaissance, in order to avoid the mistakes which we have made in the past.

Tank battles cannot be successful if conducted like cavalry charges. The enemy must be felt out and located as carefully as is done by infantry. Enemy anti-tank guns with low silhouette and very high muzzle velocity are towed in to position, placed on the flanks of armored elements and camouflaged so that the discovery of their location is very difficult. Our tank losses up to the present time are attributable in a large degree to the enemy anti-tank gun and not to enemy tanks themselves. In addition,

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I wish to state that it is generally believed by most of our higher commanders (and I subscribe to this belief) that our tactical doctrine concerning tank destroyer battalions is defective. Certainly in this theater there is as much cover for the tank as there is for the anti-tank gun which in general means none. For unarmored tank destroyer units to go out and hunt tanks which have armor and approximately the same speed as the tank destroyer units themselves, has often resulted in the loss of an undue proportion of our tank destroyers. I seriously recommend that we re-examine our tactical doctrine in this respect to the extent that our so-called tank destroyers become anti-tank guns with the mission of extending the flanks of armored units, and of preventing the penetration of infantry units by armor; that they take advantage of offensive missions only when the tactical situation permits and when it appears to be decidedly profitable for them to assume the offensive.

Except in the few instances indicated above there is nothing wrong with our tactical doctrine. The teachings of our training manuals are in general sound. What we need is more intensive training, particularly by small units coupled with unceasing supervision by all commanders. Also, we need a realization on the part of every officer and man that the German is a dangerous and resourceful enemy, worthy of our best effort in every respect.

These observations are based upon personal observations, reports of staff officers and reports by unit commanders.

/s/ L. R. Fredendall,
/t/ L. R. FREDENDALL,
Major General, U. S. Army.

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SUBJECT: Observer's report of Lt. Col. G. E. Lynch, G.S.C., Observer from Headquarters Army Ground Forces to North Africa, for the period December 30, 1942, to February 6, 1943.

Combat Intelligence units in the theatre have not had a good opportunity for proving themselves. In the landing operations, the bulk of intelligence had been obtained by WD, by the British and by Air Intelligence units prior to the action. During the landings, communications difficulties obscured the results of "intelligence work". At ORAN, for instance, the Corps Cavalry Regt. was not included in the landing troops. 1st Division Reconnaissance Troop was present as well as lower Intelligence agencies, but the coastal mountains surrounding ORAN and spray damage to radios are blamed for the difficulty of Central Task Force and 1st Div. Hq. in receiving "intelligence" sent by radio means. Asst. G-2, Lt. Col. Sloan, GSC, of Center Task Force stated that he at his post on a British Navy Carrier outside of ORAN Harbor, December 8, 9, and 10, received by ship's radio, messages sent by Bn. and Regt. C.O.'s to their next higher Hq. which were not received at all by the Hq. to which addressed.

The present Divisional Intelligence chain will require further actual use as a team in normal ground operations before a change should be considered. The operations in NORTH AFRICA which I have reviewed have been "Task Force" operations wherein the complete Division Intelligence system has not operated as such.

Better "intelligence perception" by the Bn. Commanders at the defeat of C.C. "B" near MEDJEZ EL BAB, December 10, might have prevented the large materiel losses incurred. Two Bn. C.O.'s on this occasion reacted to rumors, failed to conduct reconnaissance or to confirm battlefield rumors, and thereby failed to act properly.

Camouflage, cover and concealment were excellent in all the units I visited. However, in some sections of Algeria and Tunisia, the country is of such a nature that dispersion and cover are the only possible means of protection from the air. It is noticeable that many units have not applied white stars to all vehicles, nor the type vehicle markings prescribed by AR 850-5. The 9th and 34th Divisions, also 2nd Armored Division all wear their respective Division shoulder patches.

Road distances of U.S. truck columns are uniformly good -- 150 to 300 yards between vehicles. This is a necessity as the casual German fighter or lighter bomber plane despises no target, however small. While never attacked, I encountered several instances where lone $\frac{1}{2}$ -ton trucks and other types had been blasted off the road by German aircraft (usually fighters).

C.S. systems are functioning, but on a much looser basis than in the U.S. No positive cases have been uncovered in the II Corps since entrance into Africa. All C.S. personnel are organic, none furnished from above, except a security detachment of three officers and eighteen men in II Corps Headquarters, which is not actually C.S., but Hq. security and counterintelligence.

Surprise in the landing operations was obtained with almost complete success. Without exception, the officers I have talked with feel that had the surprise element not been present, the expedition would have failed. The proof of the degree of surprise obtained was apparent in the lack of resistance at any of the landing beaches, except by coast defense batteries and aircraft. No unit I visited met Infantry resistance on any beach.

128th R.I. Company states that they succeed in breaking many German codes because of "slips" in the "clear".

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U.S. units which the 128th R.I. Company monitors in its spare time, exchange call signs too frequently; the average net making such an exchange about every fifteen minutes. Such procedure renders the determination easy by German opposing units of the tactical system to which they are listening. German units exchange call signs each two hours at most.

Air-ground identification is poor. When an Air-Ground Support Command is operating in support of a unit, the methods taught in our manuals are used. However, most combat aircraft are not a part of the air-ground support Command and it is those who need more coordination with the ground forces. There has been at least one occasion on the Tunisian front where U.S. Fighter planes attacked U.S. ground forces, (Co B, 701 TD Bn). The causes are:

Fighter pilots are not well trained in ground troops identifications. (These comments from 12th Fighter Command and my own.) Failure of ground troops to identify themselves to friendly aircraft must bear the most blame. Units must, at all times, when close to the front, be instantly ready to give recognition signals. The fighter pilot, travelling rapidly, has little time to make his decision and, like the ground trooper, does not like to pass by a target of opportunity without action -- American half-tracks, trucks, tanks, and helmets look very much like German ones from the air.

the 2d Bn, 6th Armored Inf, was operating adjacent to the medium tank battalion of the 13th Armored Regiment to Dec. 10. A withdrawal by the way of Medjez El Bab, to reach which a bridge had to be crossed, was ordered for the night Dec. 10. Two columns of German Armored and Infantry troops were known to be approaching C.C. "B" on two roads leading SW toward Medjez El Bab; therefore a withdrawal was attempted in daylight. The 2d Bn, 6th Armored Inf, followed in trace of the medium tank battalion west to cross the river by a second bridge several miles north of the main bridge mentioned above, intending after crossing to go south on a good road which led to Medjez El Bab and paralleled the river on the opposite side. Upon reaching the bridge, the tank bn, having already crossed it, the Bn C.O. heard that there were two German M IV tanks on the other side -- there were actually two such tanks but both were non-operative. Thereupon, the Bn C.O. ordered a counter-march, with the intention of reaching Medjez by the South bridge. Due to the passage of other vehicles and his own march and counter-march, this Bn C.O. soon found his unit mired. Although the German columns were not yet near, he ordered abandon vehicles and withdrew his unit on foot. Lt. Col. Ringsock, who now commands this Bn and who was present at the battle, states that some vehicle crews refused to accept the order, remaining with their half-tracks and getting some of them back to Medjez. The Bn C.O. was relieved from command.

Factors which, if present, might have averted the defeat.

- (1) Reconnaissance before decisive action.
- (2) A stouter hearted, better balanced Bn C.O.
- (3) A better knowledge of the terrain and his materiel by the Bn. C.O.

In contrast to this Bn, the 1st Bn of the same regiment, acting under the same conditions and on the same terrain, when informed of the contemplated night withdrawal, acted as follows:

During the morning of the 10th, withdrew all vehicles over roads to the south bridge parking them near the bridge so as to be able to cross on quick notice and without delay.

Continued to hold his defensive position on a hill where he had been for several days, and when ordered, made a successful withdrawal with his vehicles.

The medium tank battalion mentioned before as having crossed the west bridge with the same intention as the C.O. 2d Bn, 6th Inf, heard of the same two M IV German tanks being in the road which he contemplated using to reach Mdejez. Therefore, he left the road with his Bn striking across country on an un-reconnoitered trail, hoping to bypass the two German tanks and then to cut back to the main road again. His Bn became mired and he ordered "abandon vehicles", withdrawing his personnel on foot. His errors were the same as the C.O. 2d Bn, 6th Armored Inf, and he was removed from command.

The other two tank battalions, I understand, met the south German column and, though hindered by mud, fought in place until driven back. Some tanks were withdrawn, others had been hit by German gunfire and others were set fire before being abandoned.

The enemy jams many frequencies above 6,000 kc so as to interfere with large stations. Jamming of our small tactical frequencies has not been noted. An "accordion" type jamming is the most frequently used.

There is a strong need for small unit cooking facilities in all combat type troops. In the Armored Force, cooking by vehicle or tank is recommended. In Infantry units, cooking by squad is desirable. Dispersion is so generally the rule for units on the front or in combat that company cooking is awkward.

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September 25, 1942

SUBJECT: Report of Lt. Colonel William S. Myrick, Jr., FA, observer from Headquarters Army Ground Forces to the United Kingdom and North Africa, is furnished for your information.

December 24 - January 7

NORTH AFRICA

Early in December, it was realized that the race for TUNIS and BIZERTE was definitely over. Units of the EAF had been fed into the British First Army, piecemeal, to meet immediate needs. The resultant was an army not properly balanced for offensive combat. In the interest of speed, provisions for permanent maintenance in the field of organizations had been sacrificed. This breaking down of units into their subordinate elements had resulted in improper employment, particularly of artillery units.

The long lines of communications, and the terrain through which they pass make the supply problem in TUNISIA extremely difficult under normal conditions. Supplies moving by rail to the East over the lines now operated by the British must pass through some of the most difficult mountain country in the world. The standard gauge French railroad extends from ALGIERS to the East, through SETIF, OULED RAHMOUN, CONSTANTINE, SOUK-AHRAS, AND SOUK-EL-ARBA. Supplies for the SOUTHERN SECTOR must be transferred from the standard gauge to the narrow gauge railroad at OULED RAHMOUN, and proceed to TEBESSA.

The worst part of the supply problem was the breaking up of units into small parts so that normal supply methods could not function. However, it appeared, at the time of the observer's visit, that this was being corrected. On a trip through this area on January 3, 4 and 5, it was noted that a definite move was on foot to relieve American units in the front lines, probably with the view of placing them again under American command. Move was also on foot to establish an American line of communications, to be operated by American personnel, and, generally, paralleling the one now operated by the British. Colonel Heavey and myself ran into advance parties of the 1st Infantry Division, seeking bivouac areas East of CONSTANTINE.

German tanks and paratroops reconnoiter by fire. Every suspicious spot is sprayed by fire from automatic weapons. Germans allow the Infantry to ride to within 2000 or 3000 yards of the objective. The tanks then try to outflank the objective, while the infantry frontal attack or the tanks make the penetration and during the resultant disorganization of the troops being attacked, the German infantry drives them out.

German aircraft have been very active in delivering dive-bomber and low-flying attacks on ground troops. The attacks are continuous in instances where ground installations have been located and sufficient antiaircraft is not present. Many instances have been reported of JU 88's attacking single motorcycles on the road. In attacks on motor columns, the aircraft will usually deliver a low-bombing attack first and then return to strafe the column. In many cases, it has appeared that the German aircraft armament is so adjusted that cannon fire is delivered on the column and, at the same time, machine guns sweep the ditches. THIS MEANS THAT MEN MUST NOT SEEK COVER IN THE DITCHES, BUT MUST CLEAR THE ROAD BY AT LEAST 40 OR 50 YARDS.

Armored Force: The long overland trip from ORAN by units of Combat Command B, 1st Armored Division, resulted in a maintenance problem not before encountered. Tank tracks of the light tanks had already been turned prior to leaving the UK, and this additional trip placed them in a bad state. After the ill-fated battle of MEDJEZ EL BAB, in which this unit suffered heavy equipment losses due to enemy action, and to bogging down of vehicles in mud, the remaining tanks of the Command had gone over 300 hours without maintenance. Complete rehabilitation and, in many cases in the mediums, complete engine replacements were necessary. Although

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the equipment of this unit has now been replaced, several excellent lessons should be learned. A TANK OR VEHICLE IN NORTH AFRICA IS WORTH TEN TIMES ITS VALUE IN THE UNITED STATES AND MUST NOT BE ABANDONED UNTIL THERE IS NO HOPE OF RECOVERY. THE OLD MANEUVER ERROR WAS REPEATED IN THIS UNIT AT A HIGH COST. IMPROPER ROUTE RECONNAISSANCE RESULTED IN THE LOSS OF A HIGH NUMBER OF COMBAT VEHICLES. THE VEHICLES BECAME STUCK IN THE MUD AND HAD TO BE ABANDONED.

That officers be instilled with the knowledge that the mistakes in combat problems in training, if not corrected, will become disastrous mistakes in battle.